PARKHOMENKO, N.M.; VASIL'YEV, N.V.

**美国建筑建筑建筑** 

Bactericidal effect of aerosols of DDT, benzene hexachloride, lysol, and anabasine sulfate; author's abstract. Zhur.mikrobiol.epid. i immun. 30 no.6:119 Je '59. (MIRA 12:10)

1. Iz Protivochumnogo instituta Kavkaza i Zakavkaz'ya.
(BACTERICIDES)

VASIL'YEV, Nikolay Vasil'yevich, prof., doktor ekonom.nauk; KOMAROV, Ye.I., red.; PONOMARAVA, A.A. tekhn.red.

[Distribution and specialization of agriculture in the U.S.S.R.]
Razmeshchenie i spetsializatsiia sel'skogo khoziaistva SSSR.
Moskva, Gosplanizdat, 1959. 143 p.
(Agriculture) (MIRA 12:12)

VASIL'YEV. Nikolay Yasil'yevich, dotsent, kand.tekhn.nauk; POLYAKOV, N.S., prof., retsenzent; SHTOKMAN, I.G., prof., doktor tekhn.nauk, retsenzent; BAKHURIN. K.I., kand.tekhn.nauk, retsenzent; KUZNETSOV, B.A., dotsent, kand.tekhn.nauk, retsenzent; BILICHEIKO, N.Ya., dotsent, kand.tekhn.nauk, retsenzent; RENGEVICH, A.A., dotsent, kand.tekhn.nauk, retsenzent; KOZLOVSKIY, S.I., dotsent, kand.tekhn.nauk, retsenzent; YEVNEVICH, A.V., dotsent, kand.tekhn.nauk, otv.red.; GARBER, T.N., red.izd-va; SHKLYAR, S.Ya., tekhn.red.

[Transportation and storage in ore dressing and briquetting plants]
Transport i sklady na obogatitel nykh i briketnykh fabrikakh.
341 p.
(MIRA 13:2)

1. Zaveduyushchiy kofedroy rudnichnogo transporta Dnepropetrovskogo gornogo instituta, chlen-korrespondent AN USSR (for Polyakov).

2. Kafedra rudnichnogo transporta Dnepropetrovskogo gornogo instituta (for Shtokman, Bakhurin, Kuznetzov, Bilichenko, Rengevich). 3. Kafedra rudnichnogo transporta Moskovskogo gornogo instituta (for Yevnevich).

(Ore dressing) (Ore handling) (Conveying machinery)

我们是许可能的第三人

17(2,12)

SOV/16-59-6-26/46

AUTHORS:

Parkhomenko, N.M. and Vasil'yev, N.V.

TITLE:

The Bactericidal Properties of DDT, BCH, Lysol and Anabasinsulfate Aerosols. Author's Summary.

PERIODICAL:

Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 6,

ABSTRACT:

The authors tested the bactericidal effects of DDT, BCH, lysol and anabasinsulfate aerosols on Pasteurella pestis in an apparatus designed by the Tsentral nyy dezinfektsionnyy institut (Central Disinfection Institute). The tests showed that the anabasinsulfate and its aerosols did not kill the bacteria. Lysol aerosol in a concentration of 200-50 mg/l killed off all the bacteria with an exposure of 8 minutes from the time of vaporization of the aerosol, and killed off part of the bacteria in a concentration of 10 mg/l with the same exposure. Pure DDT aerosol killed the microbes in 15, 50 and 60 minutes with a concentration of 300-50 mg/l. Pure DDT and commercial BCH aerosols in concentrations of 40 to 20 mg/l killed the bacteria in 2 hours. At concentrations less than 10 mg/l death did not ensue. Lysol aerosols killed the microbes in concentrations of 40 to 5 mg/l in 2 hours; in concentrations of

Card 1/2

SOV/16-59-6-26/46

The Bactericidal Properties of DDT, BCH, Lysol and Anabasinsulfate Aerosols. Author's Summary

> 1 mg/l they did not. Thus, the minimum lethal dose of DDT and BCH  $\,$ aerosols for Pasteurella pestis was 10-20 mg/l for an exposure of 2 hours. For lysol aerosols the dose was 1 to 5 mg/1.

ASSOCIATION: Protivochumnyy institut Kavkaza i Zakavkaz'ya (Caucasian and Trans-

caucasian Anti-plague Institute)

SUBMITTED:

June 23, 1958

Card 2/2

MASILYEV, N.V

14(10)

PHASE I BOOK EXPLOITATION

BOV / 2754

- Akademiya stroitel'stva i arkhitektury SSSR. Institut osnovaniy i podzemnykh sooruzheniy
- Vremennyye tekhnicheskiye ukazaniya po stroitelistvu tonneley sposobom prodavlivaniya (Temporary Technical Specifications for Tunnel Construction by the Shielding Method) Moscow, Gosstroyizdat, 1958. 178 p. 2,000 copies printed.
- Ed.: N. V. Vasil'yev, Candidate of Technical Sciences; Ed. of Publishing House: A. P. Munits; Tech. Eds: Ye. L. Temkina and N. I. Rudakova.
- PURPOSE: This book is intended for technical personnel in design and construction organizations.
- COVERAGE: This book contains information on the shielding method of tunnel construction. Techniques and operational details are discussed. Construction of the working and intermediate sections, the design of the cutting section and other parts are described, along with the equipment and attachments used in the process. The appendixes contain temporary specifications for 1) the

Card 1/3

| remborar.                                | Technical Specifications (Cont.)  | BOV/2754  |
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| waterpi<br>and 4)                        | cation of sites for the production of preferofing of sections, 3) methods in packing the the assembly and disassembly of cement molte sections. No personalities are mentione | junctions of sections,<br>ds for pouring reinforced |
| TABLE OF                                 | ONTENNES:   |   |
| Preface                                  |   |   |
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|  | Technical Specifications for Construction and Method  | of Tunnels by the                                   |
| Shieldi                                  |   | <u>-</u>  |
| Shieldi<br>I.                            | ng Method   | 10  |
| Shieldi<br>I.<br>II.                     | ng Method  General information  Arrangement of working chambers  Transport of reinforced-concrete and stee  | l<br>l<br>1 tunnel sections                         |
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| Shieldi<br>I.<br>II.<br>IV.<br>V.<br>VI. | General information Arrangement of working chambers Transport of reinforced-concrete and stee from manufacturing area to working chambers Arrangement of the cutting section  | l<br>l<br>l tunnel sections                         |

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| í | VIII. Mucking equipment IX. Miscellaneous work X. Ventilation, communication, and lighting system XI. Necessary labor force XII. Safety engineering XIII. Recommendations for making tunnels and pipe lines | 74<br>79<br>79<br>80<br>81<br>82 |
|   | Appendixes  | 89                               |
|   | AVAILABLE: Library of Congress (TA 815 .A4)   |                                  |
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KONSTANTINOV, B.P.; DEBORIN, A.M., akademik; PEYVE, Ya.V.; IOFFE, A.F., akademik; MIKHAYLOV, A.I., prof.; SATPAYEV, K.I., akademik; ZHUKOV, Ye.M., akademik; LAVRENT'YEV, M.A., akademik; SEMEHOV, M.N., akademik; PAVLOVSKIY, Ye.N., akademik; MINTS, I.I., akademik; SISAKYAN, N.M.; ROMASHKIN, P.S.; FEDOROV, Ye.K.; STECHKIN, B.S., akademik; MAYSKIY, I.M., akademik; PAVLOV, Todor, akademik; ARBUZOV, A.Ye., akademik; VASIL'YEV, N.V., doktor ekon.nauk; HELOUSOV, V.V.; MITIN, M.B., akademik; BLAJONRAVOV, A.A., akademik; KANTOROVICH, L.V.; RYBAKOV, B.A., akademik; NEMCHINOV, V.S., akademik Discussion of the address. Vest. AN SSSR 29 no.4:34-63 Ap '59. (MIRA 12:5)

1. Chlen-korrespondent AN SSSR (for Konstantinov, Peyve, Sisakyan, Romashkin, Fedorov, Belousov, Kantorovich).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858910012-6"

VASIL'YEV, N.V., kand.tekhn.nauk, red.; MUNITS, A.P., red.izd-va; TEMKINA, Ye.L., tekhn.red.; RUDAKOVA, N.I., tekhn.red.

ACTUAL CONTRACTOR CONT

[Temporary technical specifications for constructing tunnels by the pushing method] Vremennye tekhnicheskie ukazaniia po stroitel'stvu tonnelei sposobom prodavlivaniia. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 178 p. (MIRA 12:5)

1. Akademiya stroitel'stva i arkhitektury SSSR. (Tunneling)

MALTSHEV, P.K.; VASIL'YEV, N.V.

Cold welding of critical cast iron parts. TSement 24 no.6:31-32 E-D

(MIRA 12:1)

(Cement plants—Equipment and supplies)

(Nachinery—Welding)

VASILIVEV, N.V., kand. tekhn, nauk.; ALEKSANDROV, D.S., insh.

Using removable brass lining in butt welding of pipes. Mov. tekh. i pered. op. v stroi. 20 no.11:10-12 N '58. (MIRA 11:11)

(Pipe, Steel-Welding)

VASILYEV, NV

USSR/General Problems of Pathology. Immunity

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Abs Jour

: Ref Zhur - Biol., No 5, 1958, 22824

Author

: Vasilyev, N.V.

Inst Title On the Effects of the Development of Defensive Condi-

tioned Reflexes on Compliment's Titer in Rabbits.

Orig Pub

: 5-y Pavlovsk. sb. Tomskogo med. in-ta. Tomsk, 1956,

43-44

Abstract

: Establishment of defensive conditioned reflexes in rab-

bits failed to lead to permanent changes in the titer

of compliment.

Card 1/1

VASILYEV, A.V.

USSR/General Problems of Pathology. Immunity

U-1

Abs Jour

: Ref Zhur - Biol., No 5, 1958, 22325

Author

: Vasilyev, N.V.

Inst

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Title

: On the Effect of Experimental Neurotic States Upon

the Blood Compliment Content in Rabbits.

Orig Pub

5-y Pavlovsk. sb. Tomskiy med. in-ta, Tomsk, 1956,

45-47

Abstract

The development of experimental neurosis in rabbits

was unaccompanied by changes in the titer of compli-

ment.

Card 1/1

VASILYEV, N.V.

USSR/General Problems of Pathology - Immunity.

T-1

Abs Jour

: Ref Zhur - Biol., No 1, 1958, 2945

Author

Inst Title

On the Problem of Bactericidal Properties of Normal Serum

Orig Pub

: Tr. Tomskogo n.-i. in-ta vaktsin i syvorotok, 1956, 8, 244-

Abstract

The serum of rabbits has no bactericidal action (BA) on microbes of the intestinal group, but demostrates a clear BA in relation to cocci and sporebearing bacteria (B. subtilis, St. albus, B. pseudoanthracis, Micrococcus lysodeicticus and Sarcina lutea). The heating of the serum for 30 minutes at temperatures of 560 and 700 produced a significant BA inactivation for B. subtilis; complete B A loss in relation to St. albus was observed in the heating of the serum at 560. As a rule, the heating for 30 minutes at a

Card 1/2

VASIL'YEV, N.V.

Economic Research

In the Institute of Economics. Vest. AN SSSR, 22, No. 3, 1952.

Monthly List of Hussian Accessions, Library of Congress, October 1952, UNCLASSIFIED.

VASILYEV. N. V., CHEINCKOV, S. S. FNG.

Pipelines

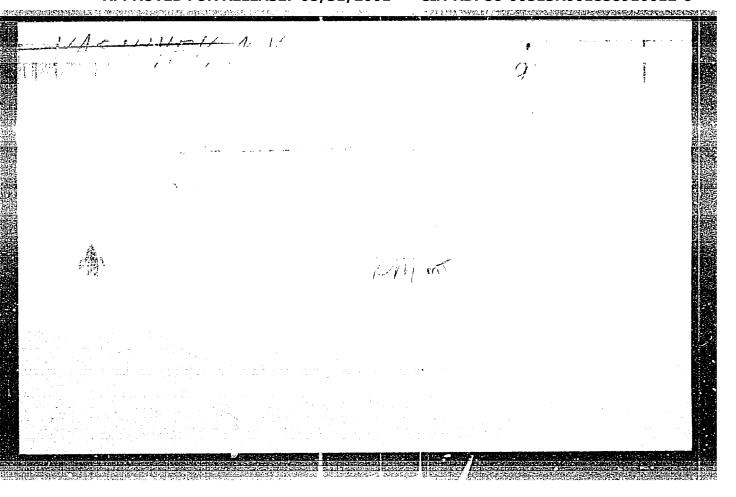
Construction of pipe lines and sewers by pressure tunneling. Gor. khoz. Mosk. 16 no. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

TIKHOMIROV, S.S., inzhener; CHEINOKOV, S.S., inzhener; VASIL'YZV, N.V., kandidat tekhnicheskikh nauk.

Shielded methods of building underground municipal structures. Gor. khoz. (MLRA 6:6)

(Moscow--Municipal engineering)



VASIL'YEV, N. V.

"The Mechanism of the Action of Sativin," Fitontsidy, Ikh Rol' V Prirode i Znacheniye Dlya Meditsiny (Phytoncides, Their Role in Nature, and Their Significance for Medicine) [a collection], Moscow, 1952, pp 322-329.

VASIL'YEV, NIKCLAY VASIL'YEVICH

VASIL'YEV, NIKCLAY VASIL'YEVICH

1955

Amerika s chernogo khoda (American from the back entrance) Ocherki I zarisovki Izd. 4, perer i dop. Moskva, Molodaya Gvardiya, 1955.

396 p. illus.

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Vestiday, Silvini V Silvinia,

Problem of the economics and planning of suburt n agriculture Miss., Gos.
ind-vo sel hoz. lit-ry 1949. 142 p. (50-18392

1881997 1949. V3

1. Agriculture - Economic aspects - Russia
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# VASIL'YEV, NIZOLAI VASIL'EVICH

Agriculture

Socialist agriculture on the road to pleaty; Moskva, Gos. izd-vo polit. lit-ry, 1951.

Monthly List of Russian Accessions, Library of Congress, May 1952. Unclassified.

VASILIVEV, Micholay Vacilityevich

VASIL'YEV, Nikolay Vasil'yevich.

Die Landwirtschaft der Sowjetunion auf dem Wege zum Uberfluss. Berlin, Deutscher Bauernverläg, 1953

159 p.

Translation from the Russian, "Sotsialisticheskoye sel'skoye khozoystvo na putyakh k izobiliyu produktov," 1951. Bibliographical footnotes.

> N/5 722.1 **.** V31

VASILYEV, N. V.

5630. VASILYEV, N. V. Razvitiye prigorodnogo sel'skogo khozyaystva.

M., lid-vo Akad. nauk SSSR, 1954. 144s 20sm (akad. nauk SSSR. nauch popul. seriya ♥ pomoshch'sel'skom, khozyaystvu). 100.000 eks

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So. Knizhnaya, Letopis, Vol 1, 1955

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| VASIL'YEV, Nikolay Vasil'yevich, Ed.  | N/5<br>722 |          |
| Za krutoy pod <sup>n</sup> yem sotsialisticheskogo sel'skogo khozyaystva (For the sharp rise of Socialist Agriculture) Moskva, Goskul'-tprosvetizdat, 1954. | .Ÿ3        |          |
| 201 p.  |            |          |
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well=1-2/mm/e, (mm/e, -2 /mm/d) (mm/lkp/t)/mp/b) Pe-4/Pt-10/Pu-4 ا المحمد ACCRESSION WE TOU WARRE AUTHOR: Benderskiy, L. S. (Engineer): By\*strov, A. M.: Vasil yev, N. Y.; myrip. Obtaining high-grade coeffines from magnesism allove by filtering the inguis amina. SOURCE: Liteynoye proizvodstvo, no. 11, 1964, 37-39 TOPIC TAGS: magnesium alley, magnesium base allow, foundry technology, allow casting, metal filtration ABSTRACT: A method of obtaining high-grade castings from magnesium alloys by filtering the lighted mental was to exting to the following to the following the first the first terms of th that there are no flow and long conserve as the limit to be a first that defects from flux and slag inclusions are reduced by a factor of 12-15, and final flow is reduced by a factor of 7-8. The optimum ratio between the total area of grid openings and the total area of the cross section of the risers should be no less than 5:1. The recommended height of the filter is 60-80mm. Orig. art. has: 7 Cord /2 figures and I table.

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| Card 2/2                    |           |  |  |  |                     |

VASIL'YEV Nikolay Vasil'yevich, doktor ekon. nauk; ERODSKAYA, M.L., red.

[What the state and collective farms gain from specialization] Chto daet spetsializatsiia sovkhozam i kolkhozam.

Moskva, Kolos, 1965. 133 p. (MIRA 19:1)

VASIL'YEV, N.V., inzh.; DIVINSKIY, Yu.L., inzh.; KNAKHOVSKIY, A.A., inzh.;
FADEYEV, N.P., inzh.

Equipment for the preparation of flux. Lit. proizv. no.ll:
19-20 N '65.

(MIRA 18:12)

PLEKHANOV, G.F.; VASILIYEV, N.V.; DEMIN, D.V.; ZHURAVLEV, V.K.; ZENKIN, G.M.; KOVALEVSKIY, A.F., LIVOV, Yu.A.; FAST, V.G., TULISKIY, A.S. [deceased]

Some results of the study of the problem of the Tunguska meteroite. Gebl.i geofiz. no.1:111-123 163. (MIRA 16:4)

l. Tomskiy meditsinskiy institut, Nauchno-issledovatel skiy institut Tomskogo politekhnicheskogo instituta i Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR. (Podkamennaya Tunguska Valley --Meteorites)

WASIL'YEV, N.V., kand. tekhn. nauk

Hydraulic machine for underground tunneling(from "Contractors and Engineers," Mr 1962.) Mont. i spets. rab. v stroi. 25 no.5129-30 My '63. (MIRA 16:7)

(United States--Tunneling-Equipment and supplies)

BADIR'YAN, G.G., prof.; VASIL'YEV, N.V., prof.; KCTOV, G.G., prof.; RUDAKOVA, Ye.A., prof.; BHAGINSKIY, B.I., doktor ekon.nauk; GUMEROV, M.N., dots.; ROMANCHENKO, A.V., doktor ekon. nauk; ABRAMOV, V.A., dots.; ALTAYSKIY, I.P., kand. ekon. nauk; GAVRILOV, V.I., dots.; RAFIKOV, M.M., kand.ekon. nauk; VINOKUR, R.D., dots.; RUSAKOV, G.K., dots.; LAVRENT'YEV, V.N., dots.; GORELIK, L.Ya., red.; PONOMAREVA, A.A., tekhn. red.

[Economics, organization and planning of agricultural production] Ekonomika, organizatsiia i planirovanie sel'skokhoziaistvennogo proizvodstva. Moskva, Ekonomizdat, 1963. 607 p. (MIRA 16:11)

(Agriculture--Economic aspects)

20 50**V**/101-58-6-9/13

AUTHORS:

Malyshev, P.K., and Vasil'yev, N.V.

TITLE:

The Welding of Primary Cast Iron Parts by the Cold Method (Svarka otvetstvennykh chugunnykh

detaley kholodnym sposobom)

PERIODICAL:

Tsement, 1958, Nr 6, pp 31-32 (USSR)

ABSTRACT:

At cement plants, many piston engines are used. These engines often break down because of crack formation in the piston heads. It is here recommended to weld these cracks using a method developed by the engineer, M.V. Lyubimov. The welding may be done with a-c of 50 to 100 amp. depending on the thickness of the welded part. The electrode is made of red copper wire 3-6 mm in diameter. Tin plating 6-9 mm broad is wound around it (Figure 2). The electrode is coated with a flux. The welded part must be 1.5 - 3 mm distant from the electrode. For welding cast

Card 1/2

21 SOY/101-58-6-9/13

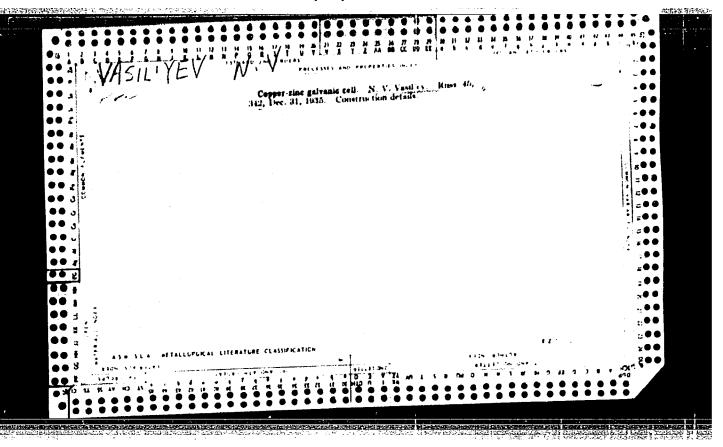
The Welding of Primary Cast Iron by the Cold Method

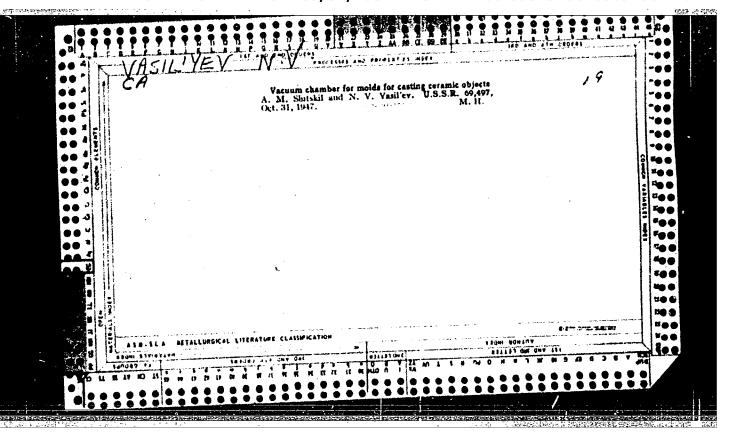
iron parts, a steel electrode of 3-5 mm in diameter is used. For welding the piston of the diesel engine MAN, groovers are made (Figure 4), to which 4 welding seams are applied with different electrodes. There are 4 diagrams.

Card 2/2

VASIL'YEV, N.V., kand. tekhn. nauk.; ALEKSANDROV, D.S., inzh.

Leying sewers by the method of pressing. Nov. tekh. i pered. op. v stroi. 20 no.11:12-14 N '58. (MIRA 11:11) (Sewers, Concrete)





VASIL'YEV, Nikolay Vasil'yevich, prof.; GALKINA, A.G., red.; ATROSHCHENKO, L.Ye., tekhn.red.

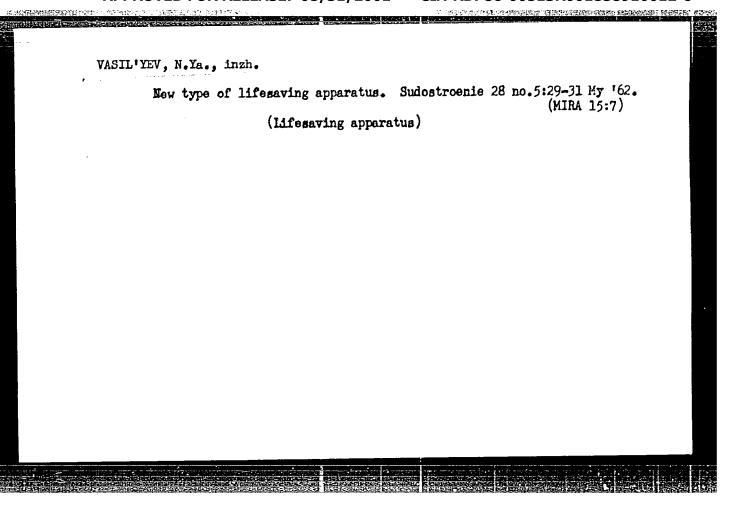
[Further specialization and the distribution of agricultural production] Dal'neishaia spetsializatsiia i razmeshchenie sel'skokhoziaistvennogo proizvodstva. Moskva, Izd-vo "Znanie," 1960. 45 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.18).

(Agricultural geography)

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ZAYCHENKO, I.Z.; VASIL'YEV, N.V.

Investigating and calculating new choke designs. Stan.i
instr. 31 no.7:10-13 J1 '60. (MIRA 13:7)
(Machine tools—Hydraulic driving)



VASIL'YEV, N.Te.; EUSHMAKIA, Yu.A.; KULALAYLV, Yu.S.

Smalling the 7% M alloy in electric-are furnaces and toiling 3,3 ton ingots. Biul.tekh.-ekoa.inform.foss.match.-isel.inct. nauch.i tekh.inform. no.8:12-13 kg '65.

(MIPA 18:12)

VASIL'YEV, N.Ye.; VERKHOVTSEV, E.V.; PROKHORENKO, K.K.; SVISTUNOV, A.M.
[decembed]; KACHANOV, N.N.

Improving the quality of ball bearing steel. Izv. vys. ucheb. zav.; chern. met. 6 no.11:88-92 '63. (MIRA 17:3)

1. Izhevskiy mekhanicheskiy institut.

PROKHERENKO, K.K.; VASIL'YEV, N.Ye.; ISHCHUK, M.Ya.; VERKHOVTSEV, E.V.

Reducing nonmetallic inclusions in roller-bearing steel. Vop.
proizv.stali ~0.7:94-116 '60. (MIRA 13:8)
(Steel--Defects)
(Bearing metals-Defects)
(Nonmetallic materials)

VASIL HEV, M. HE.

8/137/61/000/011/027/123 A060/A101

AUTHORS:

Prokhorenko, K.K., Ishchuk, N.Ya., Vvedenskiy, V.S., Vasil yev, N.

Ye., Verkhovtsev, E.V.

TITLE:

Reduction of the contamination of electric steel by fine cracks and

non-metallic impurities

PERIODICAL:

Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 53, abstract

11V305 (V sb. "Vopr. proiz-va stali", no. 8, Kiyev, AN USSR, 1961,

Steel 30 XH 2 MOA (30KhN2MFA) is smelted in 20-ton arc furnaces and TEXT: is cast in 2-ton ingots. In connection with the fact that this steel is sensitive to fine cracks, a study was made of the influence of the reducing method upon formation of fine cracks, its nonmetallic impurity content and its mechanical characteristics. The following variants of the reduction method were tried out: diffusion reduction by 75% Fe-Si with the admixture of 0.5 kg Al per ton at the end of the heat; the same but with Al added before the admixture of Fe-Cr; "precipitation" reduction by 45% Fe-Si and 0.5 kg Al per ton at the end of the heat; the same with 1.5 kg Si-Cd per ton in the ladle; reduction of 45% Fe-

Card 1/2

S/137/61/000/011/027/123 A060/A101

Reduction of the contamination ...

Si and Al 1.0 kg/ten at the end of the heat; the same but with 1.5 kg Al per ten. The percentage by weight of nonmetallic impurities in the steel was the lowest at the increased Al admixture (1.0-1.5 kg/ten). It was established that the main reason for the formation of fine cracks in the steel 30KhN2MFA are large oxide impurities deformed in the direction of rolling, the oxide impurity content and the steel affection by cracks are reduced as one raises the quantity of Al-introduced into the steel; the steel has the greatest contamination when the Al is added before introducing the Fe-Cr; the reduction method - diffusion of "precipitation" has no influence upon the quality of the steel; when Si-Cd is used for reducing the steel, the number of cracks is reduced but their size tecomes greater; the mechanical characteristics are basically the same for all the variants of the reduction method. There are 15 references.

V. Boyarshinev

[Abstracter's note: Complete translation]

Card 2/2

PROKHORENKO, K.K.; ISHCHUK, N.Ya.; VVEDENSKIY, V.S.; VASIL'YEV, N.Ye.;
VERKHOVTSEV, E.V.

Reducing the contamination of electrical steel by hair cracks and normetallic inclusions. Vop.proisv.stali no.8:55-69 '61. (MIRA 14:6)

(Steel—Defects)

S/137/61/000/012/021/149 A006/A101

AUTHORS: Prokhorenko, K. K., Ishchuk, N. Ya., Vasil'yev, N. Ye.

TIPLE: Distribution of non-metallic impurities in ball bearing steel ingots

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 59, abstract 12V359 (V so. "Vopr. proizv-va stali", no. 8, Kiyev, AN UKrSSR, 1961, 70 - 77)

TEXT: To study the distribution of non-metallic impurities, 3 ingots weighing 700, 2,000 and 3,000 kg were symbon-cast from metal of one heat. The steel was melted in a 20-ton electric furnace. Diffusion deoxidation of the metal was performed with low-carbide slag which was converted into white slag at the end of the reduction period. The metal was finally deoxidized with Al (450 g/t). During the teeming of the heat into the ladle the metal was mixed with the slag. The composition of the steel in % was: C 1.0, Mn 0.34, Si 0.28, S 0.01, P 0.014, Cr 1.3. Plates were produced by longitudinal axial cutting of the cast ingots. After polishing the plates, imprints were taken for S determination and their surfaces were subjected to deep etching. Specimens of the plates were subjected to metallographic investigations of non-metallic impurities, electrolytic dissolving metallographic investigations of non-metallic impurities, electrolytic dissolving

Card 1/2

S/137/61/000/012/021/149 A006/A101

Distribution of non-metallic impurities...

and determinations of chemical heterogeneity. Specimens and samples were taken off the crust zone, the zone of columnar and equiaxial crystals, and along the ingot axis. Along the ingot height samples were taken every 200 mm. It was established that non-uniform contamination of the steel by non-metablic impurities was due to the heterogeneous macrostructure of the ingots. The middle and lower portion of the ingots where the macrostructure is worst, were most contaminated with non-metallic impurities. A direct dependence was established between the extent of non-metallic impurities and the ingot weight, but no such dependence was revealed for the content and the area of impurities.

P. Arsent'yev

[Abstracter's note: Complete translation]

Card 2/2

### "APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858910012-6

EWT(m)/EMF(t)/EWP(b) JD/MLK L 20086-65 BT BOOK EXPLOITATION ACCESSION NR AM1049548

Prokhorenko, Kim Kondrat'vevich; Verkhovtsev, Emil' Vladimirovich; Rakumenko, Sergey Partoleyevich; Vasil'vev, Vikelay Egorovich; Ishchuk, Mikelay YAkovievi ; haden, Petr Pimenovich; Isuco, lastiny removies

Melting and pouring of quality steels (Vysplayka i razlivka kachestverny kh staley), Moscow, Izd-vo "Metallurgiya", 1964, 200 p. illus., biblio. Errata slip inserted. 2,450 copies printed.

TOPIC TAGS: quality steel, steel teeming, steel melting, metallurgical furnace

PURPOSE AND COVERAGE: This book reports on the results of work on improving the technology of melting, deoxidation, and teeming of quality steels in electric arc, acid and basic open-hearth furnaces conducted at the Izhevsk Metallurgical Plant and the Serovsk Metallurgical Combine. Great attention is given to description of the measures to reduce contamination with nonmetallic inclusions of ball bearing and structural steels, presentation of material on the effectiveness of teeming steel under a liquid slag, and to increasing the output of sound metal from the ingots due to the use of various methods of heating their hot top. The results of using rare earth elements for deoxidation and modification of steel are given. Card 1/2

| The book is intended for quality steels and can a tions.  TABLE OF CONTENTS (abrice Foreword 3 Introduction 5 Ch.I.Technology of meltich. II. Technology of Ch. IV. Steel teeming Ch. V. Teeming steel unch. VII. New methods of Ch. VII. Experience in steels 182 | ged:  ng steel in electrical steel in base arching steel in acceptable and acceptable approaches a protective leading and acceptable as a protective leading acceptable accepta | ic arc furnace<br>sic open-heart<br>cid open-heart<br>ayer 129 | s 7 h furnaces 61 h furnaces 81 |  |
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ASD(i')=2/ASD(m)=3/AFMDC/ESD(gs)MJW/ EWT(m)/EWA(d)/EWP(t)/EWP(b) 15200-65 S/0000/64/000/000/0209/0213 JD/JG/MLK ACCESSION NR: AT4048715 AUTHOR: Vvedenskiy, V. S., Prokhorenko, K. K., Zhdanov, P. L., Semenchenko, G. V., Vasil'yev, N. Ye., Verkhovtsev, Z. V., Nakonechny\*y, N. F. TITLE: A study of the effect of rare earth metals on the quality of stainless steels and SOURCE: Vsesovuznove soveshchaniye po splavam redkikh metallov, 1963. Voprosy\* steel R18 teer, a primenenty a redke tome. The orange of the free in the theory and use of rareearth metals); materialy goveenchaniya. Nicecow, izd-vo Nauka, 1994, 209-211 TOPIC TAGS: rare earth metal, stainless steel, cerium modifier, steel plasticity, austenite-carbide steel, austenite-ferrite steel, ferrocerium, steel inclusion. cerium oxysuifide, red hardness/steel R18 ABSTRACT: The study was undertaken to determine whether cerium introduced as a modifier would increase plasticity during rolling of steels 10Kh16N25M6 (austenite-carbide) and (TKh25N:3) laustenite-territe, which resist deformation. Tests were conducted under industrial conditions; ferrocorium corresponding to a de concentration of it use 43 was added to the metal before discharge or into the ladie. Additions of 0.2% to either steel increased plasticity during hot deformation. Increasing the Ce to 0.4% decreased 1/3Card

L 15200-65 ACCESSION NR: AT4048715

plasticity, owing to the formation of specific defects near the surface in the transcrystalline zone consisting of accumulations of small inclusions, possibly cerium oxides and sulfides. In the 10Kh16N25M6 steel, such addition led to a change in the distribution of carbides in the cast metal, owing probably to a decrease in carbon solubility, an increase in cerium favored carbide segregation throughout the grains rather than at their boundaries. leading to a more even distribution of carbides in the outer ingot layers. Such addition had no significant influence on the amount of the alpha phase and its distribution in the 07Kh25N13 steel. Its introduction led to a new form of non-metallic dot-like inclusions, apparently cerium oxysulfides, accumulating unevenly in the steel. Increasing the cerium. addition led to a sharp decrease (to almost complete disappearance) of manganese and iron sulfides and silicates. Cerium modification of the 19Kh15N25Mb steel at a 0.15-0.20% concentration resulted in increased exterior and interior plasticity and increased the yield of suitable blooms by The Fermi or the control of a complete frame earth metals was abled to the Kik steel alter reduction, or province which need hardness were determined after quenching. Red hardness increased by 25C, lue to the increased resistance of the martenaite to heating. Polished specimens of the cast steel showed a more even distribution of the ledeburite eutectic; this increased the plasticity during rolling. The modifier did not increase the yield. Orig. art. has: 4 figures.

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L 15200-65 ACCESSION NR: AT4048715

ASSOCIATION: None

SUBMITTED: 13Jun64

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PROKHORENKO, Kim Kondrat'yevich; VERKHOVTSEV, Emil' Vladimirovich;

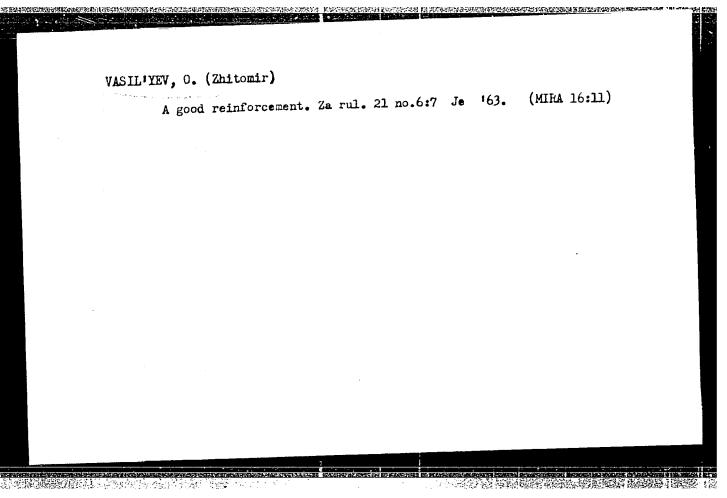
HAKUMENKO, Sergev Panteleyevich; VASIL'YEV, Nikolay
Yegorovich: ISHCHUK, Nikolay Yakovlevich; FALEIE., Ivan.
Gnvrilovich; NOSOV, Viktor Aleksandrovich; SEMENINKO, Petr
Pimenovich; ISUFOV, Vasiliy Fedorovich

[Making and pouring quality steels] Vyplavka i razlivka kachestvennykh stalei. Moskva, Izd-vo Metallurgiia, 1964. 200 p. (MIRA 17:8)

BORODAY, K.; GCLUBEV, V.; DALLAKYAN, L.; VASIL'YEV, O., inzh.

Letters to the editors. Voen. znan. 41 no.8:28 Ag '65. (MIRA 18:7)

1. Chlen prezidiuma rayonnogo komiteta Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR, Yerevan (for Dallakyan). 2. Shtab grazhdanskoy oborony Leningrada (for Vasil'yev).



ASD(f)=2/ASD(m)=3/ESD(c)EWT(m)/EMF(w)/EMA(d)/EMP(t)/EMP(b) L 14990-65 8/0000/63/000/000/0055/0064 JD/JG/MLK ACCESSION NR: AT4048120

AUTHOR: Yelyutin, V. P., Natanson, A. K., Mozzłukhin, Ye. I., Vasil'yev, O

TITLE: Internal friction of grade VA-3 tungsten wire

SOURCE: Vsesoyuznaya konferentsiya po relaksatsiçany\*m yavleniyam v metalizkh i splayakh, 3d, Voronezh, 1962. Relaksatsionny\*ye yivieniya v metaliakh i splayakh (Relax-ation phenomena in metals and alloys); trudy\* konferentsii. Moscow, Metallurgizdat, 1963, 55-64

TOPIC TAGS: tungsten wire, tungsten wire annealing, tungsten wire internal friction

ABSTRACT: The authors attempt to find the relationship between the physical and mechanical properties of grade VA-3 tungsten wire and the internal friction in order to improve the procedure for checking wire quality. Special lots of tungsten wire were selected. They differed in the residual elongation after creep tests from zero in the first lot to 1 mm in the second and 6 mm in the third, while the fourth and fifth lots failed. In the same order, the structure changed from coarse grain for the first two, medium grain for the third and fine grain for the fourth and fifth. The wire samples were 1.25, 0.52 and 0.043 mm in diameter and were vacuum heated. The testing temperature was 2700K, load 4.5 kg, duration 4 hrs. Internal friction was measured with wire samples 0, 52 mm in diameter and 66 mm long in a

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L 14990-65 ACCESSION NR: AT4048120

high temperature relaxation device with a tungsten heater, after which the structure was investigated. A tungsten-rhenium thermocouple measured the temperature. The frequency of the sample was about 1 cycle so... and the maximum relative deformation was 5x10-5. The maximum error was not over 10%. Curves in the paper show the relative internal friction obtained by dividing the internal friction at various temperatures by the internal friction at room temperature after annealing at 2100K for 2 hours. By comparing the structure of samples after reheating, it was found that the high temperature maximum of internal friction (2) mak for the condition (1) tak for lot 5, was the recrustallization temperature Similar multiple second of the control of the iron and alloys. It is known that the large design is the angle of the state of higher for fire grain samples in comparison with coarse grain samples. The temperature curves of internal friction obtained after primary heating of lots 1 and 2 did not have a high temperature maximum prior to the limit testing temperature of 2270K. The recrystallization maximum for lots 1 and 2 was at a higher temperature than that used for measuring internal friction. The maximum grain limit shea measuring internal friction of lots 3, 4 and 5 after being subjected to the restant cather during primars heating was lower than for lote 1 and 2 due to the grain size. Orig. art has 7 figures and 1 table.

Card 2/3

L 14990-65

ACCESSION NR: AT4048120

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

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#### "APPROVED FOR RELEASE: 08/31/2001

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L 1711-66 EVT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(h) IJP(c) MJW/

ACCESSION NR: AP5021950

UR/0193/65/000/008/0012/0013 669.018:621.365.2

AUTHOR: Vasil'yev, N. Ye.; Bushmakin, Yu. A.; Kulalayev, Yu. A.;

TITLE: Experience in melting the alloy 79NM in electric arc furnaces and rolling 3.3 ton ingote of this alloy

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 8, 1965, 12-13

TOPIC TAGS: nickel containing alloy, arc furnace, ingot, rolling mill, magnetic property, aluminum containing alloy

ABSTRACT: The Izhevsk Metallurgical Plant, in collaboration with the Novosibirsk Metallurgical Plant, has experimentally produced slabs of the alloy 79NM by rolling/rather than forging. This alloy is obtained by melting Armco iron, grade N-0 or N-1 nickely and grade Mo-1 ferromolybdenum in 20-ton electric arc furnaces (transformer power 5000 kva, melt weight 13-15 tons), and cast into 3.3 ton ingots which are air-cooled and, following the climination of surface defects, conveyed to a hot-rolling mill (at the Novosibirsk Metallurgical Plant) for rolling into slabs with a cross sectional area of 1.30 x370 15 mm (23 passes, with reduct-

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L 1711-66

ACCESSION NR: AP5021950

ion in area of from 55 to 20 mm per pass). At the Novosibirsk Plant the slabs are reduced to a thickness of 3 mm after pickling Coutting to a width of 120-210 mm, and deburring, and then returned to the Izhevsk Plant, where they are processed into 0.1-1.0 mm thick cold-rolled strips. Teste showed that the magnetic properties of the alloy satisfy the requirements of the State Standard 10160-62, and are largely determined by the alloy's nickel content. The first results/of this experiment showed that the melting techniques/needed some improvement: the ingots from the melts with an excessively low titanium content displayed signs of improper shrinkage. Therefore, to obtain more compact ingots, subsequent meltings were performed on increasing deoxidation with titanium metal to 18-2.0 kg/ton and with aluminum metal to 0.5-0.6 kg/ton. Then the ingot metal contained 0.08-0.1% Ti and approx. 0.05% Al. Following these and certain other modifications, the production of slabs by this method was introduced on a permanent basis at the Izhevsk Plant. As a result the rolling cost at the Novosibirsk Plant could be reduced 42% compared with forged slabs and cold-rolled strip could be obtained in bundles weighing up to 500-700 kg each without being welded along their length. Orig. art. has: 1 figure, 1 table.

ASSOCIATION; none

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KANTSEL', Ya.O., inzh.; BELYANCHIKOV, V.N., inzh.; NOVIKOV, I.V., inzh.; ZAYTSEV, L.Ye., inzh.; AKIL'YE', S.A., inzh.; BELKIN, V.A., inzh.; FOCHKINA, L.A., inzh.; YASIL'YEV, O.A., inzh.; KUZ'MINYKH, A.A., red.izd-va; SHIBKOVA, K.Ye., tekhn. red.

[Service life of parts of excavating, construction and road machinery; a reference catalog] Sroki sluzhby detalei ekskavatorov, stroitel'nykh i dorozhnykh mashin; katalog-spravochnik. Izd.2., perer. i dop. Moskva, Goslesbumizdat. Pt.1.[Excavating machinery and hoisting equipment; cranes, loaders, winches, and elevators] Ekskavatory i pod"emno-transportnoe oborudovanie; krany, pogruzchiki, lebedki, elevatory. 1963.

(MIRA 17:3)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye po snabzheniyu i sbytu produktsii tyazhelogo, transportnogo i stroitel'no-dorozhnogo mashinostroyeniya. Tekhnicheskaya kontora "Stroityazhmashzapchast'." Konstruktorskoye byuro.

YELYUTIN, V.P.; PANOV, A.V.; NATANSON, A.K.; SHULEPOV, V.I.; VASILIYEV, O.A.

Apparatus for measuring internal friction and shear modulus at high temperatures. Zav. lab. 28 no.9:1123-1126 '62.

(MIRA 16:6)

 Moskovskiy institut stali i splavov. (Testing machines)

The state of the s

BELYANCHIKOV, V.N., inzh.; NOVIKOV, I.V., inzh.; ZAYTSEV. L.Ye., inzh.; AKIL'YEV, S.A., inzh.; BELKIN, V A., inzh.; POCHKINA, L.A., inzh.; VASIL'YEV, O.A., inzh.; Prinimali uchastiye: KOPEYKINA, O.P.; SMIRNOVA, A.N.; BELKINA, S.S.; SHILINA, Ye.I.; LAGUNOV, Ye.N.; REZNIK, S.Z.; MISMAN, B.I.; KUZ'MINYKH, A.A., Inzh., SHIEKOVA, R.Ye., Inzh., Inzh

[Operational life of parts of excavating, construction, and road machinery; a reference catalog] Sroki sluzbby detalei ckskavatorov, stroitel'nykh i dorozhnykh mashir, katalog spravochnik. Izd.2., perer. i dop. Moskva, Goslesbumizdat. Pt.2. [Road, construction machinery, and machinery for manufacturing building materials] Dorozhnye, stroitel'nye mashiny i mashiny dlia proizvodstva stroitel'nykh materialov. 1963. 306 p. (MIRA 17:4)

1. "Stroitiyazhmashzapchast'," Tekhnicheskaya kontora. Konstruktorskoye byuro.

· 當點體觀論計

YELYUTIN, V.P.; NATANSON, A.K.; MOZZHUKHIN, K.T.; VASIL'YEV, O.A.

Investigating internal friction in grade BA-3 tungsten wire.
Fiz. met. i metalloved. 15 no.5:748-753 My '63. (MIRA 16:8)

1. Moskovskiy institut stali i splavov.
(Tungsten-Testing) (Internel friction)

L 18550-63 EWP(q)/EMT(m)/BDS AFFTC/ASD JD/JG ACCESSION NR: AP3001701 S/0126/63/015/005/0748/0753

AUTHORS: Yelyutin, V.P., Natanson, A.K., Nozzhukhin, K.I., Vasil'yev, O.A.

TITLE: Investigation of internal friction in tungsten VA-3 wire (7)
SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 5, 1963, 748-753

TOPIC TACS: tungsten, internal friction, tungsten VA-3 wire

ABSTRACT: The internal friction in the four samples of the VA-3 wire (used in the production of electric bulb filament) has been studied at temperatures up to 2270K. The results obtained were compared with the internal structure of the wire and its residual elongation values obtained from the creep test. The wire was 1.25 mm in diameter, the load was 2 kg, and the time interval was 4 hours. Before the internal friction was measured the wire was drawn to a diameter of 0.52 mm. Measurements were taken twice--immediately after the drawing and again during the second annealing. Curves expressing relation of temperature to internal friction of the wire with a considerable residual elongation had a peak at 2100-2150K caused by recrystallization. This peak was absent in the case of small elongations because of its shift into the higher temperature region. The internal friction level at the second measurement was correlated to the sample behavior during the first measurement. Samples with the recrystallization process arrested during the Cord 1/2

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| first measurement had small f<br>zation had large friction val | riction values; those with a coues. Orig. art. has: 1 table | ntimued recrystalli-<br>and 4 figures. |          |
| ASSOCIATION: Moskovskiy inst<br>Alloys)                        | itut stali i splavov (Moscow In                             | stitute of Steel and                   | <u> </u> |
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L 8557-65 EWT(m)/EWP(k)/EWP(q)/EWP(b) SSD/ASD(m)-3/AFWL/ASD(f)/ESD(c)
ACCESSION NR: AR4044212 MJW/JD/JG S/0137/64/000/006/1038/1039

SOURCE: Ref. zh. Metallurgiya, Abs. 51227

B

AUTHOR: Yelyutin, V. P.; Natanson, A. K.; Mozzhukhin, Ye. I.; Vasil'yev,

TITLE: Internal friction of tungsten wire of brand VA-3

CITED SOURCE: Sb. Relaksats. yavleniya v raet. i splavakh. M., Metallurgizdat, 1963, 55-64

TOPIC TAGS: internal friction, tungsten, wire

TRANSLATION: Investigation is conducted on 5 groups of W wire, differing in the results of test for creep at 2700- K and in structure in the recrystallized state. Internal friction was measured on wire samples of length 65 mm and diameter 0.52 mm in a high-temperature relaxometer with a tubular W heater. Measurements were conducted twice: during first heating of the wire directly after drawing, and during

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L 8557-65

ACCESSION NR: AR4044212

second heating of the same sample. The frequency of the oscillations of the sample was ~1 cps; the maximum relative deformation was 5 · 10-5. On the temperature curves of internal friction for groups of wires 1 and 2, obtained during first heating of the sample (these groups possess minimum elongation after test for creep and have the most favorable coarse-grained structure with grains stretched along the axis of the wire), there is no high-temperature maximum internal-friction at 1750-2250° K. For wires of group 5 (microcrystalline equiaxial structure, possessing low resintivity to creep) the maximum internal friction is at 1750° K. Internal-friction temperature curves obtained during secure heating of the sample are lower than the curves of first heating, but have, in the case of groups and dan analygous character. For the remaining groups these curves sharply differ in the location of the high-temperature branch in the interval DXX-154x \*. The emarged thoreas of internal friction with a Mark the second of a mark terising of great A smoother increase of age compared for the common with a for the state of the first the way, will the person to be a man in the second of the

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L 8557-65 ACCESSION NR: AR4044212

gation of the structure of recrystallised wire. The temperature curves of internal friction in the case of both heatings for all investigated groups have maximum at 1500° K, while the height of this maximum is greatest for groups 1 and 2. The high-temperature maximum internal friction, at ~2000° K for groups 3 and 4 and 1750° K for group 5, is recrystallisational. The given maximum is caused by the growth of the grain during collective recrystallization during the first heating of the sample. In the case of groups 1 and 2 the recrystallisation maximum internal friction shifts toward the region of higher temperatures. Bibliography 6 references.

SUB CODE: MM, AS

ENCL: 00

Card 3/3

O. B. VASIL'YEV and GRIGOR'YEV, P. V.

"Photometric Observations of the Solar Corona With Automatic Aerial Cameras During the Total Solar Eclipse of June 30, 1954"

(Total Eclipse of the Sun, February 2), 1952 and June 30, 1954, Transactions of the Empedition to Observe Solar Eclipses) Moscow, Ind-vo All 386R, 1959.

KRISHTOFOVICH, A.N. [deceased]; L'VOV, V.Ye.; MARKOV, A.V., professor;
KOROLEV, A.Y.; GOLOSHITSKIY, L.P.; OGORODNIKOV, K.F., professor;
EYGENSON, M.S., professor; LOZIH-LOZIHSKIY, L.K., professor;
VOROB'YEV, A.G., professor; KOZLOVA, K.I.; KAZRNHOV, B.A.; SUSLOV,
A.K.; GEL'FREYKH, G.B.; VASIL'YEV, O.B.; LICHKOV, B.L., professor;
SYROMYATHIKOV; KUTYHEVA, A.P.; KATTERFEL'D, G.N.; SYTINSKAYA, N.N.;
SHARONOV, V.V.; SUVOROV, N.I.; KUCHEROV, N.I.; TIKHOV, G.A.;
GORSHKOV, P.M.

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Addresses by A.N.Krishtofovich and others. Trudy Sekt.astrobot.AM
Kazakh.SSR 4:68-157 '55. (MLRA 9:12)

(Mars (Planet))

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s/035/60/000/04/12/017 A001/A001

Translation from: Referativnyy zhurmal, Astronomiya 1 Geodeziza, 1960, No. 4, p. 44, # 3178

AUTHORS:

Grigor'yev, P. V., Vasil'yev, O. B.

TITLE:

Photometric Observations of the Solar Gorona With Autoratic Aerial

Cameras at the Total Solar Eclipse of 1954, June 30

Cam

PERIODICAL: V sb.: Polnyye solnechn. zatmeniya 25 fevr. 1952 1 30 iyunya 1954,

Moscow, AN SSSR, 1958, pp. 207-222

The results of processing the photographs of the solar corona taken by an expedition of LGU in Yeysk at the total solar solicse are reported. Automatic aerial cameras made it possible to take 100 photographs of the solar corona during the time of the total phase (124 sec). The cameras had Industan-17 lenses (F=50 cm, D=10 cm); exposures lasted 1/100 sec and intervals between them 3 sec. Photographing was made on aerial photofilms of two types in combination with various glass light filters: panchromatic film with red and crange filters, isochromatic film with yellow, light-yellow filters and without a filter. This arrangement made it possible to take photographs in five regions of spectrum  $\nu$ 

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858910012-6"

\$/035/60/000/04/12/017 A001/A001

Photometric Observations of the Solar Corona with Automatic Aerial Cameras at the Total Solar Eclipse of 1954, June 30

with different effective wavelengths. Calibration was carried out by means of a tubular photometer whose scale was printed-in along the whole film on its both sides. Negatives were measured on a Hartmann microphotometer by the usual method, in intervals of 0.01-0.02 mm along diameters of the solar disk and of  $10^{\circ}$  in position angle. Relative brightnesses of the solar corona at various wavelengths were obtained. The variation of brightness in the solar corona with a distance from the solar disk center is well represented by the formula:  $E = N/R^{\circ}$ . The values of empirically chosen coefficients N and n are tabulated. The course of corona brightness for various  $\lambda_{eff}$  is presented, as well as isophotes of the corona; degrees of isophote flattening are calculated. The corona of 1954 is characteristic for the epoch of solar activity minimum. Standardization on the basis of Moon's photographs taken at full moon was unsatisfactory. It is pointed out that standardization is possible on the basis of photographs of a white plate arranged normally to solar rays. Photographs of the solar corona at various wavelengths, tables and graphs are presented.

Y, F. Yesipov

Card 2/2

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83340 S/169/60/000/007/011/015 A005/A001

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 7, p. 203, #8462

AUTHOR:

Vasil'yev, O.B.

TITLE:

Experience of Photometric Observations of Noctilucent Clouds by the All-Union Astronomic-Geodetical Society During the International Geophysical Year (1957-1958)

PERIODICAL:

Tr. Soveshchaniya po serebristym oblakam 1958, (P.I.). Tartu, 1959,

pp. 77-84 (English summary)

TEXT: The task of photometrical observations of noctilucent clouds consists in obtaining the albedo of various points of the field observed. These data allow the estimation of the density and quantity of the substance and also the altitude distributions of density and thickness of clouds over the field of noctilucent clouds, when some assumptions are introduced as to the dimensions and the albedo of the particles forming the noctilucent clouds. The indicatrix of glow of the particles forming noctilucent clouds may be derived from the data on the albedo of one and the same point of noctilucent clouds, when these are obtained from different points of the earth's surface located along the same great circle. The

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Card 1/3

83340

S/169/60/000/007/011/016 A005/A001

Experience of Photometric Observations of Noctilucent Clouds by the All-Union Astronomic-Geodetical Society During the International Geophysical Year (1957-1958)

task of polarimetric observations consists in the determination of the polarization degree and the direction of the plane of preferential glow oscillations. These data permit the judgment on the physical nature of the particles forming the noctilucent clouds. The photometric and polarimetric investigations of noctilucent clouds were carried out during the IGY period (seasons 1957 and 1958). The photographic survey of the noctilucent clouds was performed with three photocameras fixed on a special stand, which permitted the following surveys: a) the panoramic photography of the noctilucent cloud field; b) the polarimetric surveyc) the survey of the vertical of the line of the corresponding photometric observations of noctilucent clouds. In surveying the noctilucent cloud field panorama, the optical axes of the camerae were arranged fan-like embracing an angle of about 100° in the azimuth, for performing the absolute photometry. In polarimetric surveying, the optic axes of the camerae were directed parallel, and polarization light-filters were put on the camera objectives, which were turned through 60° relative to each other. In surveying the vertical of the line of corresponding photometric observations, the camerae were directed vertically, whereby their optic axes were arranged that they embraced the angle from the horizin to the zenith. This survey was carried out every day in the twilight hours at intervals of 10 min Card 2/3

83340 S/169/60/000/007**/**011/016 A005/A001

Experience of Photometric Observations of Noctilucent Clouds by the All-Union Astronomic-Geodetical Society During the International Geophysical Year (1957-1958)

independently of the presence of clouds. The photographs of the noctilucent clouds were taken always with the same constant exposure of 30 sec, but the diaphragms were varied, depending on the brightness of the clouds and the twilight sky. All the photographs obtained were gauged by means of a special scale, which was photographed by the camerae during the observations. Photographic observations of the Sun were carried out for determining the atmospheric transparency and for standardizing the photographs obtained during the entire observation period. The test of the method in practice of observations in 1957 and 1958 showed its reliability, the possibility of attaining the necessary accuracy of the observations, and the convenience in carrying out the observations proper. The processing of observation results is not concluded yet, but the preliminary data obtained show that the albedo of the noctilucent clouds amounts to a very small value of the order of 10-5-10-7, and the brightness of the clouds fluctuates within wide limits. The noctilucent clouds show negative polarization reaching 30% and depending apparently on the brightness. L.V. Yerasova

Translator's note: This is the full translation of the original Russian abstract. Card 3/3

VASIL'YEV, O.B. (Leningrad)

Taking atmospheric extinctions into account in observing noctilucent clouds. Biul. VAGO no.25:24-25 159. (MIRA 13:3)

1. Leningradskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo obshchestva. (Clouds)

## VASIL'YEV, O.B.

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Simple reduction of coordin\_tes in photographic photometry of noctilucent clouds. Biul.VAGO no.27:40-47 '60. (MIRA 13:6)

 Leningradskoye otdeleniye Vsesoyusnogo otdeleniya astronomogeodezicheskogo obshchestva.
 (Clouds)
 (Astronomy, Spherical and practical)

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L 14486-66 EWT(1) GS/GW

ACC NR: AT6003721

SOURCE CODE: UR/0000/65/000/000/0163/0171

AUTHORS: Vasil'yev, O. B.; Sumin, V. S.

ORG: Astronomical Committee, AN SSSR (Astronomichaskiy sovet AN SSSR)

TITLE: Automatic and semiautomatic devices for measuring tremor on star trails

SOURCE: AN SSSR. Astronomicheskiy sovet. Opticheskaya nestabil'nost' zemnoy atmosfery (Optical instability of the earth's atmosphere). Hoscow, Izd-vo Nauka, 1965, 163-171

TOPIC TAGS: atmospheric refraction, atmospheric disturbance, stellar astronomy, photographic image/ MIR-12 microscope, UPT-4 amplifier, MF-2 microphotometer

ABSTRACT: Star trails on photographs are undulatory because of tremor arising from atmospheric instability. Evaluation of tremor is made by determining deviation of points on a trail from the average position. V. B. Sukhov first advanced the idea of making this determination semiautomatic. He did not succeed in his efforts, but his ideas are the basis of the works discussed here. The common technique of measuring tremor involves the use of an MIR-12 microscope with the print so placed that the cross nairs of the ocular are shifted along the trail. The observer keeps

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the cross hairs on the middle of the trail, following it through all its bendings. A linear potentiometer is connected to the screw of the ocular, and the voltage produced in the potentiometer is proportional to rotation of the screw. In a device designed by V. S. Sumin in 1960, coupled potentiometers are used in conjunction with two integrators. Because of nonlinearity of the potentiometers, dispersion has to be determined from tables computed for measured current values. This is inconvenient, and furthermore, error appears when dispersion is low and current values high. O. B. Vasil'yev designed apparatus at about the same time, using a technique that eliminates the squaring operation required in the preceding system. This technique is based on random deviation of stars from mean position, operating in accordance with Gauss's theorem. The mean amplitude of tremor, measured on the instrument, is converted to mean-square amplification by a simple, constant coefficient. Sumin devised another set of equipment in 1961-the Sigma-1using UPT-4 operational amplifiers. | These are cascade amplifiers, containing three stages, each changing the sign of input voltage. Because of high amplification, these are used only with considerable feedback. A simple circuit for the squarelaw generator is employed, and this gives good results. In 1962 Vasil yev proposed an instrument for automatic operation in which an MF-2 microphotometer was used as the data unit. The light from a lamp passes through a condenser to a slit. An objective focuses the image of the slit upon the film. A second objective projects

Card 2/3

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ACC NR: AT6003721

a magnified image of the film segment upon photoconductive cells. A movable mirror is placed between the second objective and the photoconductive cells, set on the axis of a microammeter. The image of the slit is made to intersect the trail at right angles. Shift of the trail is recorded through the photocells as potential. This potential may be converted by a system similar to Sigma-1, called Sigma-2. These latter systems are being modified continuously. Orig. art. has: 11 figures, (Fig. 11 is not included with the reproduced copy) and 14 formulas.

SUB CODE:

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SUBM DATE: 15May65/

ORIG REF: 003

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Card 3/3

#### "APPROVED FOR RELEASE: 08/31/2001

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L 45312-66 EWT(1)/FCC GW

SOURCE COIE: UR/0269/66/000/001/0027/0027

ACC NR: AR6016282

AUTHORS: Vasiliyav, O. B.; Frolov, V. N.

TITLE: The calculation of night spectral transparency of the atmosphere by the

expedition of the GAO in Zelenchuk in 1963

SOURCE: Ref. zh. Astronomiya, Abs. 1.51.233

REF SOURCE: Izv. Gl. astron. observ. v Pulkove, v. 24, no. 2, 1965, 207-213

TOPIC TAGS: spectrographic analysis, atmospheric transparency

ABSTRACT: Results are presented for preliminary calculations of spectral transparency of the earth's atmosphere. The work is based on the photographic method, and was carried out by the astronomical-climatic expedition of the Main Astronomical Observatory of the Academy of Sciences SSSR in Zelenchuk. Observations were made in the summer of 1963 with the aid of an AZT-7 meniscus Kassegrenovskiy reflector in the summer of 1963 with the aid of an AZT-7 meniscus Kassegrenovskiy reflector in combination with ASP-9 glit spectrograph. The diameter and focus distance of the telescope were 200 and 2000 mm respectively. Reverse dispersion of the spectrograph was 215 A/mm along the line H B. It turned out that the mean coefficient of transparency diminished evenly from 0.84 near the 575 mm wavelength to 0.65 near the 400 mm wavelength. Results of the observations are compared with other observations and with meteorological data on the night of the observations. Bibliography of 11 titles. D. Kuli-Zade /Translation of abstract/

# VASIL'YEV, O.B.

Periodicity of appearances of noctilucent clouds. Astron.tsir. no.224132-34 Ag '61. (MIRA 16:1)

1. Glavnaya astronomicheskaya observatoriya AN SSSR. (Clouds)

ASTAPOVICH, I.S.; BAKULII, P.I.; BAKHALEV, A.M.; BRONSHTEN, V.A.; BUGOSLAVSKAYA, N.Ya.[deceased]; VASILYEV, O.B.; GRISHIN, N.I.; DAGAYEV, M.M.; DUBROVSKIY, K.K.[deceased]; ZAKHALOV, G.P.; ZOTKIN, I.T.; KRLIER, Ye.N.; KRILOV, Ye.L.; KULIKOVSKIY, P.G.; KUNITSKIY, R.V.; KUROCHKIL, N.Ye.; ORLOV, S.V.[deceased]; POFOV, P.I.; FUSHKOV, N.V.; RYBAKOV, A.I.; RYABOV, Yu.A.; SYTINSKAYA, N.N.; TSESEVICH, V.P.; SIICHI GOLEV, B.M.; VORONTSOV-VEL'YAMINOV, B.A., red.; POLOMAREVA, G.A., red.; KRYUCHKOVA, V.N., tekhn. red.

[Astronomical calender; permanent part] Astronomicheskii kalendar'; postoiannaia chast'. Izd.5., polnost'iu perer. Otv. red. F.I.Bakulin. Red.kol.V.A.Bronshten i dr. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1962. 771 p. (MIRA 15:4)

(Astronomy-Yearbooks)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858910012-6"

31-245 \$/169/62/000/003/088/098 D228/D301

3,5120

AUTHOR:

Vasil'yev, 0. B.

TITLE:

Processing photometric noctilucent cloud observations in the Leningradskoye otdeleniye BATO (Leningrad Di-

vision, VAGO)

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 3, 1962, 18-19, abstract 3G135 (Tr. VI Soveshchaniya po serebristym oblakam, 1959, Riga, AN LatvSSR, 1961, 35-48)

TEXT: Photographic, photometric, and polarimetric observations of notilucent clouds are described; these were carried out in July-August 1957 at the town of Bologoye, Kalinin region. Small-size ر (FED-2) cameras were used to photograph the noctilucent clouds. Both photometric and polarimetric surveys of the noctilucent clouds, and also one of the vertical of the line of the corresponding photometric observations of the noctilucent clouds, were made by means of the same cameras. In the polarimetric survey, to eliminate the possibility of obtaining false polarization as a re-

Card 1/4

**APPROVED FOR RELEASE: 08/31/2001** CIA-RDP86-00513R001858910012-6" Processing photometric noctilucent ...

\$/169/62/000/003/088/098 D228/D301

sult of different observational errors, the same source of unpolarized light was photographed on all three cameras simultaneously with the cloud survey. The polarimetric survey was conducted with polaroids. The polaroids' polarization planes were fixed at angles of 0, 60, and 120° to the vertical. The resulting photographs were calibrated by means of a tubular photometer. A special fitting was employed to standardize the noctilucent-cloud prints. The atmoc heric transparency was observed on a universal wedge photometer. cut of the 75 noctifucent-cloud prints, obtained in the observations, 11 of the best copies were selected. The prints were processed on an M4-6 (MF-6) microphotometer. Both the optical densities and the rectangular coordinates of the corresponding points of the mostilusent-cloud field on the photograph were measured in the processing. The tying to celestial horizontal coordinates was accomplished by measuring the coordinates of ground orientationpoints on the print (the horizontal coordinates of these orienting points were determined by theodolite surveying). The measured optical densities were converted to intensities, and a correction

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Card 2/:

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**\$/169/62/000/003/0**88/098 **D228/D301** 

Processing photometric noctilucent ...

was introduced for the field's photometric error. Then, the brightness of the points was calculated in absolute solar units from the formula:

$$B = \mathcal{T} \frac{b}{b_e} \left( \frac{\mathcal{T}_1}{\mathcal{T}_2} \right)^2 d$$

where  $\mathcal V$  is the passage coefficient of the fitting's screen; o is the brightness of the field's points in a provisional system of calibrated scale units; b is the brightness of the fitting's translucent screen, situated normal to the sun's rays within the atmosphere, in the same system of units; be is the sun's parallax at the moment

when nottilucent clouds and the sun are respectively observed / Abstractor's note: There may be an error in the Russian original here, as "b" is repeated twice. /; and d is the factor that takes into account the exposure difference when observing nottilucent clouds and the sun. Curves of the distribution of the apparent brightness

Card 3/4

Processing photometric noctilucent ... S/169/62/000/003/088/038

along the noctilucent-cloud field at varying heights above the horizon were obtained as a result of the performed work. The change in the contrast of noctilucent clouds with their surrounding background of sky at different angles of the sun's sinking below the horizon was studied. If half the sum of the sky points lying above and below the observed part of the noctilucent cloud is taken for the brightness of the surrounding background  $B_b$ , where  $B_b = \frac{B_b + B_b}{2}$  then the contrast of the detail with a brightness Bagainer its surrounding background will be expressed by the formula:  $K = \frac{B_b + B_b}{2}$ . When processing the polarimetric observations of noctilucent clouds, it was found that the clouds show a strongly negative rolarization, which reaches 30% at separate points and depends on the angle of scattering. This dependence does not appear to be the same for different moments of the observations. Abstracter's note: Complete translation. 7

Card 4/4

**的课程的证明**是一种自己的证明证明中的的

GORELIK, B.M., BUKHINA, M.F., RATNER, A.V., Prinimali uchastiye:, VASIL'YEV, O.B., KOROLEVA, V.M.

Investigating the compression of round section rubber rings and cylindrical specimens. Eauch.i res. 19 no.2:23-28 F 160.

(MIRA 13:6)

1. Nauchno-issledovateliskiy institut resinovoy promyshlennosti.
(Rubber--Testing)

CORELIK, B.M.; BUKHINA, M.F.; RATNER, A.V.; Frinimali uchastiye: VASIL'YEV,
O.B.; KOROLEVA, V.M.

Change of contact area during the deformation of rubber cylinders and rings. Kauch. i rez. 20 no.1:12-17 Ja '61.

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.
(Rubber goods-Testing)
(Deforantions(Mechanics))

- 1. VASIL'YEV, O. F.
- 2. USSR (600)
- 4. Gromeka, Ippolit Stepanovich, 1851-1839
- I. S. Gromeka and his works in the field of hydromechanics. Izv. AN SSSR. Otd. Tekh. nauk. no. 7, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

VASIL'YEV, O. F.

Among the papers presented by the First All-Union Conference on Aerohydrodynamics (8-13 Dec 1952) convened by the Institute of Mechanics, Academy of Sciences USSR, was:

"Some Questions on the Theory of Spiral and Circulatory Streams" by Vasil'yev, O. F.

SO: Izvestiya AN USSR, Otdeleniye Tekhnicheskikh Nauk, No. 6, Moscow, June 1953, (W-30662, 12 July 1954)

VASIL'YEV, O. F.

"Mechanics of Spiral Currents and Currents With Transverse Circulation." Sub 3 Dec 51, Moscow Inst of Engineers of Water Economy ineni V. R. Villyams

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

**有数据的图像** 

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124-1957-1-426

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 53 (USSR)

Vasil'yev, O.F. AUTHOR:

Some Problems of the Mechanics of Helical and Circulatory TITLE:

Flows (Nekotoryye voprosy mekhaniki vintovykh i

tsirkulyatsionnykh potokov)

PERIODICAL: Sb. tr. Mosk. inzh.-stroit. in-ta, 1955, Nr 9, pp 65-99

An examination is presented of two-parameter nonhelicoidal and helicoidal stationary flows (where helicoidal flows are under-ABSTRACT: stood to exhibit collinearity of the vortex and velocity vectors) in a non-viscous fluid. The examination is based on the classical investigation by I. S. Gromeka (Sobraniye sochineniy. Izd-vo AN SSSR, 1952, pp 76-148) and represents a further development and generalization of some results of that investigation. The Author remarks on the significance of the theoretical reasonings under examination for the practical calculation of deliberately induced transverse currents in water flows (p 65), indicating, in particular, the qualitative satisfactoriness of the comparison

between theoretical and experimental data for the numerical computation performed (p 96). Having written the equations of Card 1/3

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**APPROVED FOR RELEASE: 08/31/2001** 

124-1957-1-426

Some Problems of the Mechanics of Helical and Circulatory Flows

nonhelicoidal and helicoidal two-parameter motions in terms of Cartesian, cylindrical, and spherical coordinates, the A. draws several special conclusions for example, on the erroneousness of Potapov's opinion (Potapov, M. V., Sochineniya, Vol II, Sel'khozgiz, 1951) on the independence of the transverse circulation from the longitudinal velocity distribution; also on the elliptical distribution diagram of the longitudinal velocities in a circular pipe

$$v_z = \sqrt{v_{max}^2 - 2 a^2 T^2}$$

if the peripheral velocity is ar, while the energy is uniformly distributed). Since the equations are non-linear and elliptical, the Author linearizes the equations and expands the arbitrary functions of  $\psi$ , just like a stream function, in a series and, having assumed them constant in the first approximation, assumes them to be linear in the second approximation. In the case of prismatic channels, the first approximation for the lengthwise velocity yields

Card 2/3

(see card 3 for equation)

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124-1957-1-426

Some Problems of the Mechanics of Helical and Circulatory Flows

$$q_3 = W = \sqrt{w_0^2 + 2 C \gamma}$$

where  $\mathbf{w}_{o}$  is the boundary-layer velocity, to which corresponds a  $\psi$  value of zero. The second approximation yields

$$w = \sqrt{w_0^2 + 2 \times w_0 \psi + k^2 \psi^2}$$

where (X > 1) and k is a positive constant. It is noted that the problem of the linearized first approximation of the flow in a prismatic channel, for the boundary condition (Y = 0), is reduced to the problem of the torsion of a prismatic bar or the flexure of a uniformly loaded membrane.

V. M. Makkaveyev

1. Fluids--Flow--Analysis

Card 3/3